

1 **I. Claims 1-20 are not obvious over Madnick in view of Kurz**

2 In an office action dated March 27, 2001, the Examiner rejected claims 1-20  
3 using the combination of Madnick and Kurz. The Applicants responded to that office  
4 action on August 27, 2001. In rejecting claims 1-20 over the combination of Madnick  
5 and Kurz, the Examiner asserted that the Applicants' arguments "had been fully and  
6 carefully considered but they are not persuasive." See November 23, 2001 Office  
7 Action, pg. 16. In repeating the rejection, the Examiner did not however answer the  
8 substance of Applicants' primary argument: the Examiner's failure to make a prima facie  
9 case of obviousness.

10 The Applicants respectfully remind the Examiner that where "the applicant  
11 traverses any rejection, the examiner should, if he or she repeats the rejection, take  
12 note of the applicant's argument and answer the substance of it." MPEP § 707.07(f).  
13 Applicants repeat the second two arguments below for the Examiner's convenience. In  
14 response to the Examiner's assertion of the combination of Madnick and Kurz,  
15 Applicants argued that "the asserted combination of Madnick and Kurz is improper as  
16 based on hindsight analysis . . . because the asserted combination would [] have had no  
17 utility and therefore no desirability." 8/27/01 Response, pg. 5. The Examiner did not  
18 answer the substance of this argument.

19 To meet the burden of prima facie obviousness, the Examiner must put forth  
20 evidence to fulfill three criteria: 1) there must be a suggestion or motivation to modify  
21 the reference or combine reference teachings, 2) there must be a reasonable likelihood  
22 of success of the modification or combination, and 3) the prior art references must teach  
23 or suggest all of the claim limitations. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438  
24 (Fed. Cir. 1991).

25 Applicants respectfully submit that the Examiner has not made a prima facie  
26 case of obviousness under § 103(a) because the asserted references are not properly  
27 combinable. As set forth in the Applicants' August 27, 2001 Response, there is no  
28 suggestion or motivation in the prior art to modify Madnick with Kurz to arrive at the  
29 claimed invention. Indeed, Applicants respectfully submit that the asserted combination

1 would destroy, or at least moot, the intended function of Kurz. *See In re Gordon*, 733  
2 F.2d 900 (Fed. Cir. 1984).

3 Applicants respectfully request that the Examiner's rejections of Claims 1-20 as  
4 obvious over Madnick in view of Kurz be withdrawn as based on improperly combined  
5 references.

6 **II. Claims 1-7, 9-17 and 20 are not obvious over Spyglass**

7 The Examiner has rejected claims 1-7, 9-17 and 20 as obvious over Spyglass.  
8 The Examiner acknowledges that Spyglass does not teach data mining or data mining  
9 language, but summarily asserts "these limitations would have been obvious to one of  
10 ordinary skill in the art at the time of the invention. The Examiner asserts that Spyglass  
11 Prism "teaches applying conversion rules via a conversion script, as applied to a Web  
12 page for converting tags in said Web page, suggesting the mining of a page with a  
13 script in order to find, extract, and replace various target tags, providing the advantage  
14 of an automated conversion script to Spyglass Prism." *See* November 23, 2002 Office  
15 Action, pg. 12.

16 Applicants respectfully submit that the Examiner has not made a prima facie  
17 case of obviousness. Spyglass Prism teaches making content from the World-Wide  
18 Web ("Web") displayable on non-Super VGA devices. The objective of Spyglass Prism  
19 is content conversion for a non-traditional display. Spyglass Prism does not teach  
20 content extraction.

21 To meet the burden of prima facie obviousness, the Examiner must put forth  
22 evidence to fulfill three criteria: 1) there must be a suggestion or motivation to modify  
23 the reference or combine reference teachings, 2) there must be a reasonable likelihood  
24 of success of the modification or combination, and 3) the prior art references must teach  
25 or suggest all of the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438  
26 (Fed. Cir. 1991).

27 The Examiner has already acknowledged that Spyglass does not teach data  
28 mining expressions or data mining conversion language. More specifically, Spyglass  
29 does not teach at least the entire step of "extracting one or more selected hypertext

1 elements from the document object model using one or more data mining expressions  
2 from a data mining conversion language." See pending claim 1. Spyglass also does  
3 not teach or suggest the step of "creating a document object model from the first  
4 hypertext electronic document." *Id.*

5 The Examiner cites to the second paragraph on page 5 of Spyglass as  
6 suggesting data mining expressions and data mining conversion language. Applicants  
7 respectfully submit that the cited passage does not teach or suggest extracting  
8 hypertext elements using data mining expressions as recited in claim 1 for content  
9 extraction. Rather, the cited passage teaches conversion rules for optimal viewing on a  
10 requesting device. For example, the cited passage states

11 Prism's Content Converter selects a set of conversion rules  
12 that define how Web content will be translated to provide  
13 optimal viewing on the requesting device. These rules pass  
14 content retrieved from the Web site through specific  
15 Conversion Routines. For example, an image conversion  
16 script for a handheld PDA may convert images to GIF,  
17 reduce the color depth, reformat the image for a 240 x 480  
18 pixel display, and remove background images and  
19 comments (sic) from the HTML document.  
20

21 Spyglass, pg. 5. The passage is followed by several lists of rules that include  
22 conversion rules for images and conversion rules for HTML documents. *Id.* All of the  
23 listed rules relate to modifying the display. None of the rules suggest that the content of  
24 a web page may be converted by content extraction, or by removing specific desired  
25 hypertext elements relating to data that the user selects for viewing. In addition, none of  
26 the rules suggest creating a document object model from the first hypertext document.

27 For the reasons set forth above with respect to claim 1, Spyglass does not teach  
28 or suggest a document object model or a data mining conversion language as recited in  
29 claim 20. With respect to independent claim 15, Spyglass does not teach or suggest  
30 the "applying a data mining conversion language" step. Spyglass is directed to  
31 conversion of content for optimal viewing on the requesting device. Spyglass does not  
32 teach or suggest content extraction using a data mining conversion language.

1 Applicants respectfully submit that the Examiner has not shown that there is a  
2 suggestion or motivation to modify Spyglass in Spyglass itself to arrive at claims 1, 15  
3 and 20. The Examiner has also not shown that Spyglass teaches or suggests all of the  
4 claim limitations of claims 1, 15 and 20. Applicants respectfully request that claims 1,  
5 15 and 20 are allowable and that the Examiner's rejections should be withdrawn.  
6 Claims 2-7, 9-14, 16 and 17 are also allowable as dependent from allowable  
7 independent claims.

8  
9 **III. Claims 8, 18-19 are not obvious over Spyglass and further in view of**  
10 **Madnick**  
11

12 The Examiner rejected claims 8, 18-19 as obvious over Spyglass and further in  
13 view of Madnick. Applicants respectfully submit that the Examiner has not made a  
14 prima facie case of obviousness under § 103(a) because the asserted references are  
15 not properly combinable. There is no suggestion or motivation in the prior art to  
16 combine Spyglass with Madnick to arrive at the claimed invention. Obviousness cannot  
17 be established by combining the teachings of the prior art to produce the claimed  
18 invention, absent some teaching, suggestion or incentive supporting the combination.  
19 *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572 (Fed. Cir. 1984).  
20 Applicants respectfully submit that no teaching, suggestion or incentive outside of  
21 Applicants' own specification exists to make the asserted combination.

22 Madnick is directed to a system for querying disparate, heterogeneous data  
23 sources over a network on which at least some of the sources are semi-structured data  
24 sources. See Madnick, Abstract. Madnick provides a system for querying data sources  
25 regardless of whether they are structured (like a SQL data base) or semi-structured (like  
26 a Web page) in a manner that is transparent to the user. Madnick Col. 2, lines 27-42.  
27 Furthermore, Madnick teaches only accessing the data. Madnick does not teach how  
28 the data is displayed or how it is used at all.

29 Spyglass Prism teaches making content from the World-Wide Web ("Web")  
30 displayable on non-Super VGA devices. The objective of Spyglass Prism is content

1 conversion for a non-traditional display. Spyglass Prism does not teach content  
2 extraction or the selection or specification for selecting data at all. Nor does Prism  
3 suggest any desirability in extracting any content.

4 Although claims 8, and 18-19 are allowable as dependent from allowable  
5 independent claims 1 and 15, Applicants respectfully submit that neither Madnick nor  
6 Spyglass suggest any desire, need or incentive for combining the data extraction  
7 teachings of Madnick with the content conversion for optimal viewing teachings of  
8 Spyglass to arrive at the claimed invention. Withdrawal of the Examiner's obviousness  
9 rejections of claims based on Madnick and Spyglass is respectfully requested.

10 **CONCLUSION**

11 Applicants therefore respectfully submit that all pending claims 1-20 are  
12 allowable and request that the rejections to those claims be withdrawn. If any questions  
13 or issues remain, the Examiner is invited to immediately contact the undersigned  
14 attorney, Enrique Perez, at his direct dial number (312) 913-2104.

15 Respectfully submitted,

16  
17 McDONNELL BOEHNNEN  
18 HULBERT & BERGHOFF  
19

20  
21  
22 Date: 4-23-02

23 By:   
24 Enrique Perez  
25 Registration No. 43,583  
26  
27  
28  
29

**APPENDIX A****Claims presently pending**

1. In a first network with a plurality of network devices connected to a second network with a plurality of network devices, a method of content conversion, comprising the following steps:

receiving a first hypertext electronic document on a second network device on a first network, from a third network device on a second network;

creating a document object model from the first hypertext electronic document;

extracting one or more selected hypertext elements from the document object model using one or more data mining expressions from a data mining conversion language;

converting one or more extracted hypertext elements using one or more data mining operations from a data mining conversion language; and

creating a second hypertext electronic document on the second network device including one or more converted hypertext elements.

2. The method of Claim 1 further comprising sending the second hypertext electronic document to a first network device on the first network device for display.

3. A computer readable medium having stored therein instructions for causing a central processing unit to execute the method of Claim 1.

4. The method of Claim 1 wherein the step of extracting one or more selected hypertext elements includes saving references to selected hypertext elements in a symbol table.

1 5. The method of Claim 1 wherein the step of creating a document object model  
2 includes saving hypertext elements in a hierarchical model used to represent the first  
3 hypertext electronic document.

1 6. The method of Claim 1 wherein the step of extracting one or more selected hypertext  
2 elements from the document object model using one or more data mining expressions  
3 from a data mining conversion language includes extracting one or more hypertext  
4 elements from one or more other hypertext electronic documents.

1 7. The method of Claim 1 wherein the step of converting one or more extracted  
2 hypertext elements using one or more data mining operations includes referencing one  
3 or more converted hypertext elements in a hypertext template used to create the  
4 second hypertext electronic document.

1 8. The method of Claim 1 wherein the step of converting one or more extracted  
2 hypertext elements using one or more data mining operations includes replacing one or  
3 more extracted hypertext elements with a prefix including the characters "&%" to  
4 indicate an extracted hypertext element is a data mining conversion variable.

1 9. The method of Claim 1 wherein the second network device is a content converter and  
2 the third network device is an electronic document server.

1 10. The method of Claim 1 wherein the second network is the Internet or an intranet.

1 11. The method of Claim 1 wherein the one or more data mining expressions include  
2 object-oriented methods for any of: obtaining a hypertext electronic document type;  
3 obtaining all elements in a document; obtaining the nth-number element in a list;  
4 obtaining elements with a specified tag; obtaining one or more attributes of an element;

5 obtaining one or all rows in a table; obtaining one or all cells in a table row; obtaining  
6 one or all areas in an image map; obtaining one or all sub-elements in a form; for  
7 obtaining one or more options in a form-select list; or for obtaining additional sub-  
8 elements for a selected element.

1

1 12. The method of Claim 1 wherein the step of extracting one or more selected  
2 hypertext elements from the document object model using one or more data mining  
3 expressions includes extracting one or more selected hypertext elements using a  
4 conversion script including one or more data mining operations.

1

1 13. The method of Claim 1 wherein the step of converting one or more extracted  
2 hypertext elements includes converting one or more original hypertext elements into  
3 one or more converted hypertext elements, one or more original hypertext element  
4 attributes into one or more converted hypertext element attributes, or adding one or  
5 more new hypertext element attributes.

1

1 14. The method of Claim 1 wherein the step of creating a second hypertext electronic  
2 document on the second network device including one or more converted hypertext  
3 elements includes creating a second hypertext electronic document from a hypertext  
4 template used to store one or more hypertext elements from the first hypertext  
5 electronic document.

1

1 15. In a first network with a plurality of network devices connected to a second network  
2 with a plurality of network devices, a method of content conversion, comprising the  
3 following steps:

4 receiving a request for first hypertext electronic document on a  
5 second network device on a first network from a first network device on  
6 the first network;



7 obtaining the first hypertext electronic document from a third  
8 network device on the second network device;  
9 applying a data mining conversion language to convert one or more  
10 original hypertext elements from the first hypertext electronic document  
11 into one or more converted hypertext elements;  
12 creating a second hypertext electronic document from the one or  
13 more converted hypertext elements; and  
14 sending the second hypertext electronic document to the first  
15 network device in response to the request for the first hypertext electronic  
16 document.

1  
1 16. A computer readable medium having stored therein instructions for causing a  
2 central processing unit to execute the method of Claim 15.

1  
1 17. The method of Claim 15 wherein the first network device is a hand-held device, the  
2 second network device is a content converter and the third network device is an  
3 electronic document server.

1  
1 18. The method of Claim 15 wherein the step of applying a data mining conversion  
2 language includes creating one or more converted hypertext elements with a prefix  
3 including the characters "&%" indicating the converted hypertext elements are data  
4 mining conversion language variables.

1  
1 19. The method of Claim 15 wherein the step of creating a second hypertext electronic  
2 document from the one or more converted hypertext elements includes substituting  
3 content from the first hypertext electronic document into one or more converted  
4 hypertext elements having a prefix including the characters "&%".

1 20. A content conversion system, comprising in combination:

2 a content converter for converting a first hypertext electronic  
3 document into a second hypertext electronic document using a data  
4 mining conversion language;

5 a document object model for storing hypertext elements of a first  
6 hypertext electronic document;

7 a proxy server for communicating with a plurality of network devices  
8 making requests for first hypertext electronic documents, for  
9 communicating with a context converter and with a plurality of content  
10 servers on a network providing first hypertext electronic documents;

11 a data mining conversion language with a plurality of data mining  
12 conversion expressions and a plurality of data mining conversion  
13 operations for converting a plurality of original hypertext elements into a  
14 plurality of converted hypertext elements.